

## CLAIMS

What is claimed is:

1. A system for recording information regarding telephone calls comprising one or more segments, comprising:
  - 5 (a) a first memory having one or more locations storing audio data regarding telephone call segments relating to one or more telephone calls;
  - (b) a second memory having one or more locations storing data regarding telephony events associated with the telephone call segments; and
  - (c) a processor programmed to identify telephone call segments that relate to  
10 one telephone call and to construct a data representation of a lifetime of the telephone call, using data regarding telephony events associated with the telephone call segments of the telephone call.
- 15 2. The system of claim 1 wherein the data representation comprises
  - (i) a list of participants in the telephone call,
  - (ii) a list of telephony events regarding the call,
  - (iii) a list containing the time each telephony event occurred, and
  - (iv) the start and end time of the call.
- 20 3. The system of claim 1 wherein the data representation comprises, for each segment of the call, the location of the stored audio data of that segment.
- 25 4. The system of claim 1 wherein the first memory and the second memory are the same device.
5. The system of claim 1 wherein the processor is comprised of a plurality of physically separated components.
- 30 6. The system of claim 2 wherein the data representation further comprises the start time, end time, and duration of each telephone call.

7. The system of claim 3 wherein the data representation further comprises the start time, end time, and duration of each recorded segment.

8. The system of claim 3 wherein the location of the stored audio data of each  
5 segment comprises the location of a .WAV file containing the audio data.

9. The system of claim 8 wherein the data representation further comprises the offset within the .WAV file to the start of the stored audio data.

10. The system of claim 1 wherein the data regarding telephony events is received  
10 from a plurality of sources connected to a telephone switching environment.

11. The system of claim 10 wherein at least one of the sources is a real-time link  
and at least one of the sources is not a real-time link.

12. The system of claim 10 wherein at least one of the sources is a CTI link and at  
15 least one of the sources is an SMDR link.

13. The system of claim 1 further comprising display software that uses said data  
20 representation to display a graphical representation of said telephone call.

14. The system of claim 2 further comprising display software that uses said data  
representation to display a graphical representation of said telephone call.

15. The system of claim 14 wherein the graphical representation comprises a  
25 representation of each segment of the call.

16. The system of claim 14 wherein the graphical representation comprises a  
representation of the length of time of each segment of the call.

17. The system of claim 13 wherein the display software further displays a table comprising data from the data representation.

18. A method for recording information regarding telephone calls comprising one  
5 or more segments, comprising:

(a) receiving audio data regarding one or more telephone call segments relating to one or more telephone calls, and data regarding telephony events associated with said telephone call segments;

(b) storing the received audio data regarding telephone call segments;

10 (c) storing the received data regarding telephony events associated with said telephone call segments;

(d) identifying telephone call segments that relate to one telephone call; and

(e) constructing a data representation of a lifetime of the telephone call using data regarding telephony events associated with the telephone call segments of the telephone  
15 call.

19. The method of claim 18 wherein the data representation comprises

(i) a list of participants in the telephone call,

(ii) a list of telephony events regarding the call,

20 (iii) a list containing the time each telephony event occurred, and

(iv) the start and end time of the call.

20. The method of claim 18 wherein the data representation comprises, for each segment of the call, the location of the stored audio data of that segment.

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21. The method of claim 18 wherein the received audio data and the data regarding telephony events is stored in the same memory.

22. The method of claim 18 wherein the data representation is constructed by a  
30 plurality of physically separated processors.

23. The method of claim 19 wherein the data representation further comprises the start time, end time, and duration of each telephone call.

24. The method of claim 20 wherein the data representation further comprises the  
5 start time, end time, and duration of each recorded segment.

25. The method of claim 20 wherein the location of the stored audio data of each segment comprises the location of a .WAV file containing the audio data.

10 26. The method of claim 25 wherein the data representation further comprises the offset within the .WAV file to the start of the stored audio data.

27. The method of claim 18 wherein the data regarding telephony events is received from a plurality of sources connected to a telephone switching environment.

15 28. The method of claim 27 wherein at least one of the sources is a real-time link and at least one of the sources is not a real-time link.

29. The method of claim 27 wherein at least one of the sources is a CTI link and at  
20 least one of the sources is an SMDR link.

30. The method of claim 18 further comprising the step of using said data representation to display a graphical representation of said telephone call.

25 31. The method of claim 19 further comprising the step of using said data representation to display a graphical representation of said telephone call.

32. The method of claim 31 wherein the graphical representation comprises a representation of each segment of the call.

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33. The method of claim 31 wherein the graphical representation comprises a representation of the length of time of each segment of the call.

34. The method of claim 30 further comprising the step of displaying a table  
5 comprising data from the data representation.